SCC	NO.	

AN ORDINANCE REPEALING AND REENACTING CHAPTER 17.04 OF TITLE 17 OF THE SACRAMENTO COUNTY CODE RELATING TO FIRE PREVENTION AND ADOPTING BY REFERENCE A CERTAIN CODE KNOWN AS THE "CALIFORNIA FIRE CODE, TITLE 24, CALIFORNIA CODE OF REGULATIONS, PART 9", INCORPORATING THE 2000 EDITION OF THE "UNIFORM FIRE CODE", AS ADOPTED AND COMPILED BY THE WESTERN FIRE CHIEFS ASSOCIATION, AND THE 1997 EDITION OF THE UNIFORM FIRE CODE STANDARDS, AS ADOPTED AND COMPILED BY THE INTERNATIONAL FIRE CODE INSTITUTE.

The Board of Supervisors of the County of Sacramento, State of California, ordains as follows:

SECTION 1. Chapter 17.04, CALIFORNIA BUILDING STANDARDS TITLE 24, PART 9, INCORPORATING THE 1997 EDITION OF THE UNIFORM FIRE CODE, encompassing Sections 17.04.010 through and including 17.04.180 of Title 17 is hereby repealed.

SECTION 2. Chapter 17.04 is hereby added to Title 17 of the Sacramento County to read as follows:

17.04.010 Adoption Of Uniform Fire Code. There is hereby adopted by the Board of Supervisors of the County of Sacramento for the purpose of prescribing regulations governing conditions hazardous to life and property from fire or explosion, that certain code known as the California Fire Code, Title 24, California Code of Regulations, Part 9, incorporating the Uniform Fire Code published by the Western Fire Chiefs Association, being particularly the 2000 Edition, including the appendices thereof, and the Uniform Fire Code Standards published by the International Fire Code Institute, being particularly the 1997 Edition, and the wholes thereof, save and except such portions as hereinafter deleted, modified or amended herein. Not less than one (1) copy of such code has been and now is filed with the Clerk of the Board of Supervisors. From the effective date of this ordinance, the provisions thereof shall be controlling within the limits of Sacramento County except that any inconsistent regulations and ordinances adopted pursuant to applicable law by a fire protection district or a community service district having a fire department within the County shall be controlling within that district's jurisdictional areas.

**17.04.020 Enforcement.** The division of authority for enforcement of this chapter shall be as follows:

- (a) The Chief of any fire protection district or a community service district having a fire department or his/her designated representatives shall have authority to enforce this chapter and issue citations for violations in their respective districts.
- (b) The Fire Chief, Airport Firefighting and Airfield Operations, of the Sacramento County Airport System, County of Sacramento, or his/her designated representatives shall

have authority to enforce this chapter and issue citations for violations at all County of Sacramento Airports.

- **17.04.030 Findings.** The Findings of Fact are filed separately with the California State Fire Marshals Office, State Department of Housing and Community Development and County Board of Supervisors.
- **17.04 040 Definitions.** (a) Whenever the word "Uniform Fire Code" is used in this ordinance, it shall mean the California Fire Code, Title 24, California Code of Regulations, Part 9, incorporating the 2000 Edition of the Uniform Fire Code.
- (b) Wherever the word "municipality" is used in the Uniform Fire Code, it shall mean the unincorporated areas in the County of Sacramento.
- (c) Wherever the words "Chief" or "Chief of the bureau of fire prevention" are used in the Uniform Fire Code, they shall mean the Chief of any fire protection district or a Community Service District that has a fire department or their designated representatives, within their respective jurisdictions.
- 17.04.050 Modifications. The Chief or his/her designated representative may modify any of the provisions of the Uniform Fire Code upon application in writing by the owner or lessee, or his/her duly authorized agent, when the Chief or his/her designated representatives determine there are practical difficulties in the way of carrying out the strict letter of the code, provided that the spirit of the code shall be observed, public safety secured, and substantial justice done. The particulars of such modification when granted or allowed and the decision of the Chief or his/her designated representative thereof shall be entered upon the records of the department and a signed copy shall be furnished by the applicant.

For the purposes of this section, the cost of compliance with the provisions of this Code shall not constitute a practical difficulty.

- **17.04.060 Appeals.** (a) Any person aggrieved by any decision or action of the Chief of any fire protection district or his/her designated representative, may appeal to the Board of Directors of such fire protection district, or Community Services District, by filing a written notice of appeal with the Clerk of the Board of Directors within thirty (30) days from the date such decision or action was taken; or (b) to the County of Sacramento Board of Supervisors, Clerk of the Board in the Sacramento County Airport System.
- 17.04.070 New Materials, Processes Or Occupancies Which May Require Permits. The Chief may appoint two members from his/her staff to act as a committee to determine and specify, after giving affected persons an opportunity to be heard at an office hearing, any new material, processes or occupancies, which shall require permits, in addition to those now enumerated in the code. The Chief or his/her designated representative shall post such list in a conspicuous place in his/her office, and distribute copies thereof to interested persons.
- **17.04.080 Penalties.** (a) Any person who violates any of the provisions of this chapter and the code hereby adopted or fails to comply therewith, or who violates or fails to comply with any order made thereunder, or who builds in violation of any detailed statement of specifications or plans thereunder, or who fails to comply with such an order as affirmed

or modified by the Board of Supervisors or by a court of competent jurisdiction, within the time fixed herein, shall severally for each and every such violation be guilty of an infraction, punishment by a fine not to exceed two hundred fifty dollars (\$250.00). Violation of Section 103.4.4 Citations, Section 103.4.3.1 Compliance with Orders or Notices, Section 103.4.3.2 Compliance with Tag, Section 103.4.3.3 Removal and Destruction of Signs and Tags, are punishable by fine of one thousand dollars (\$1,000.00), or by imprisonment not to exceed six (6) months, or by both such fine and imprisonment. The imposition of one penalty for any violation shall not excuse the violation or permit it to continue; and all persons shall be required to correct or remedy such violation or defects within a reasonable time to be determined by the Chief on a case-by-case basis. When not otherwise specified each day or portion thereof during which any violation occurs or continues shall constitute a separate offense.

(b) The application of the above penalty shall not be held to prevent the enforced removal of prohibited conditions.

# 17.04.100 Amendments To The 2000 Edition Of The Uniform Fire Code.

TABLE OF CONTENTS is amended by deleting the following:

# Sample Ordinance for Adoption of the Uniform Fire Code.....xv

Pages xv through xvi are deleted.

SECTION 103 - INSPECTION AND ENFORCEMENT is amended by adding the following:

**103.1.1.1 Contract Inspector.** The Chief or his/her designated representatives may require the owner or the person in possession or control of the building or premises to provide, without charge to the fire department, a special inspector ("Contract Inspector"), when the department has no technical expertise available to conduct the required inspections.

The Contract Inspector shall be a qualified person who shall demonstrate his/her competence to the satisfaction of the Chief, for inspection of a particular type of construction, operations, fire extinguishing or detection system, or process.

Duties and responsibilities of the Contract Inspector shall include but not be limited to the following:

- (a) The Contract Inspector shall observe the work assigned for conformance with the approved design drawings and specifications.
- (b) The Contract Inspector shall furnish inspection reports to the Chief, building official, and other designated persons as required by the Chief. All discrepancies shall be brought to the immediate attention of the contractor for correction, then if uncorrected, to the proper design authority, Chief, and to the building official.
- (c) The Contract Inspector shall submit a final signed report stating whether the work requiring inspection was, to the best of his/her knowledge, in conformance with the approved plans and specifications and the applicable workmanship provision of this code.

- **103.3.2.2.1 Administrative Costs.** When a test or inspection is scheduled and the contractor fails to perform to the satisfaction of the authority having jurisdiction, the authority having jurisdiction may bill the contractor for actual time spent traveling to and from the test/inspection location and the time spent at the test/inspection site as well as administrative costs.
- **103.3.2.4 Inspection Record Card.** Work requiring Fire Department approval may commence, but the person doing the work shall have posted or otherwise made available an inspection record card such as to allow the Chief to conveniently make the required entries thereon regarding inspection of the work. Work shall not be covered until the required inspections are completed. This card shall remain posted or remain otherwise available by the permit holder until the Chief has granted final approval.
- **103.3.5 Plans.** A minimum of two (2) copies of the complete plans, specifications, and information for new construction, remodeling, fill-in projects, or additions to buildings shall be submitted for review prior to construction to the Chief or his/her designated representatives having jurisdiction. Plan approval shall be required prior to issuance of a fire district Inspection Record Card for those instances where such card may be required.
- **103.4.4.1 Citations.** The Chief, or his/her duly authorized representative, may issue citations for infractions or misdemeanor violations of this chapter pursuant to Section 13871 of the Health and Safety Code of the State of California and Chapter 5c (commencing with Section 853.6) of Title 3 of Part 2 of the Penal Code of the State of California.

SECTION 105 - PERMITS is amended as follows:

- **105.4 Inspection Required.** Before a permit is issued, the Chief may inspect and approve the receptacles, vehicles, buildings, devices, premises, storage space or areas to be used. Instances where laws or regulations are enforced by departments other than the fire department, joint approval shall be obtained from all departments concerned.
- **105.8 Permit Required.** A permit may be required from the bureau of fire prevention prior to engaging in the following activities, operations, practice or functions:
- SECTION 105 PERMIT is amended by adding the following to 105.8 Permit Required:
- m2.1 **Marina.** To operate a marina, see Appendix II-C and Article 52, Uniform Fire Code.
- m2.2 **Marina.** Open flame, to use open flame for vessel maintenance and repair, see Appendix II-C, Uniform Fire Code.
- m2.3 **Marina.** Barbecue, to use open flame for cooking purposes at a marina, see Appendix II-C, Uniform Fire Code.

SECTION 206 - E is amended by adding the following:

**ELECTRONIC MONITORING SYSTEM** shall mean an approved method to electronically detect and transmit to an approved alarm service provider's Type A (listed) Central Station, information indicating that the automatic fire sprinkler system or electronic fire detection system has been activated and shall have the ability to relay the alarm to the (a) Sacramento Regional Fire/EMS Communications Center; or (b) to the Sacramento International Airport Communication Center in an approved manner.

SECTION 207 - F FALSE ALARM is amended as follows:

**FALSE ALARM** shall mean the giving, signaling or transmission to any public fire station or company or to any officer or employee thereof, whether by telephone, spoken word or otherwise, information to the effect that there is a fire, medical emergency, rescue request, or other need for emergency service at or near the place indicated by the person giving, signaling, or transmitting such information, and there is found to be no need for emergency services.

SECTION 218 - Q is amended by adding the following:

**QUALIFIED ATTENDANT** shall mean an individual that has been trained in the proper methods of the handling, storage and dispensing of any material, product or substance regulated by the code. These shall include, but not be limited to ammonia, chlorine, cryogenic fluids, flammable and combustible liquids and gases.

Said attendant must be able to demonstrate to the satisfaction of the Chief that he or she possesses adequate knowledge in the subject area.

SECTION 901 - GENERAL is amended as follows:

Section 901.4.4 "Premises identification" is amended as follows:

#### 901.4.4 Premises identification.

- **901.4.4.1 General.** Approved numbers or addresses shall be placed prior to occupying on all new and existing buildings in such a position as to be plainly visible and legible from the street or road fronting the property. Said numbers shall contrast with their background. In setting requirements for addressing, the Chief may be guided by the standard published by the County of Sacramento Building Inspection Division, "Posting of Building Addresses".
- **901.4.4.2 Multiple tenant buildings.** Multiple tenant spaces serviced by vehicular access to the rear through any driveway, alleyway, or parking lot shall have numbers or addresses placed prior to occupancy on all new and existing buildings as to be plainly visible and legible from the rear access way when deemed necessary by the Chief. Multiple tenant spaces serviced by rear access through a corridor, exit court, or exit yard shall have approved numbers or addresses displayed on the rear of the tenant space, when deemed necessary by the Chief.

Multiple tenant spaces that front on interior walkways or pedestrian malls shall have approved numbers or addresses placed over the entrance door in all new and existing buildings. An illuminated annunciator or directory board shall be required at every entrance where deemed necessary by the Chief.

**901.4.4.3 Illumination.** Addressing shall be illuminated at night in all new buildings. Signs shall be internally or externally illuminated. When the luminance or the face of a sign is from an external source, it shall have an intensity of not less than 5.0 foot-candles. Internally illuminated signs shall provide equivalent luminance.

SECTION 902 - FIRE DEPARTMENT ACCESS is amended as follows:

902.2.1 is added as follows:

902.2.1 **Required Access**. Fire apparatus access roads shall be provided in accordance with Sections 901 and 902.2 for every facility, building or portion of a building including residential subdivisions in excess of 40 dwelling units hereafter constructed or moved into or within the jurisdiction when any portion of the facility or any portion of an exterior wall of the first story of the building is located more than 150 feet (45 720mm) from fire apparatus access as measured by an approved route around the exterior of the building or facility. See also Section 902.3 for personnel access to buildings.

## **EXCEPTIONS:**

- 1. When buildings are completely protected with an approved automatic fire sprinkler system, the provisions of Sections 902.2.1 and 902.2.2 may be modified by the chief.
- 2. When access roads cannot be installed due to location on property, topography, waterways, nonnegotiable grades or other similar conditions, the chief is authorized to require additional fire protection as specified in Section 1001.9.
- 3. When there are not more than two Group R, Division 3, or Group U Occupancies, the requirements of Sections 902.2.1 and 902.2.2 may be modified by the chief.

More than one fire apparatus road shall be provided in residential subdivisions in excess of 40 dwelling units and/or when it is determined by the chief that access by a single road might be impaired by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

For high-piled combustible storage, see Section 8102.6.1

For required access during construction, alteration or demolition of a building, see Section 8704.2.

SECTION 903 - WATER SUPPLIES AND FIRE HYDRANTS is amended as follows:

**903.2 Required Water Supply for Fire Protection.** An approved water supply capable of supplying the required fire flow for fire protection shall be provided to all premises upon which facilities, buildings or portions of buildings are hereafter constructed or moved

into or within the jurisdiction. When any portion of the facility or building protected is in excess of 150 feet (45 720 mm) from a water supply on a public street, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains capable of supplying the required fire flow shall be provided when required by the Chief. See Section 903.4.

## **EXCEPTIONS:**

- 1. Group R, Division 3 Occupancies provided with an automatic fire sprinkler system approved by the adopted NFPA Standard in areas not provided with a public water supply.
- 2. Group U, Division 1 Occupancies.
- 3. Water Supplies for Suburban and Rural Fire Fighting. Where the standards of this code cannot be met for development in rural areas, a fire sprinkler system or pressurized water system acceptable to the AHJ shall be acceptable to meet the water supplies required. Such proposals shall also be subject to the following:
  - a. The structure is beyond 3,000 (914 M) feet of any existing adequate sized water system. Structures within 3000 (914 M) feet of an existing adequate sized water system, but beyond a water purveyor service area, will be reviewed on an individual basis.
  - b. When public or private water becomes available, connection to such a system shall be required.

SECTION 1001 - GENERAL is amended as follows:

Section 1001.3 "Plans" is amended as follows:

**1001.3 Plans.** Complete plans and specifications of fire alarm systems shall be submitted for review and approval prior to system installation. Plans and specifications shall include, but not be limited to, a floor plan, cross section detail, riser diagrams, location of all alarm-initiating and alarm-signaling devices, alarm control- and trouble-signaling equipment, annunciators, power connection, battery calculations, conductor type and sizes, voltage drop calculations; and manufacture model numbers including cut sheets and listing information from a nationally recognized testing laboratory and the California State Fire Marshal's listing number(s).

All manual or automatic fire detection system plans and calculations or both shall bear the stamp of approval of a qualified registered professional engineer or fire alarm contractor (C-10), licensed for said work by the State of California. One copy may be retained by the Chief. Plans and specifications shall be provided at no cost to the Fire Department.

Section 1001.5.3 "Systems out of service" is amended as follows:

**1001.5.3 Systems out of service.** The Chief shall be notified when any required fire protection or fire alarm system is placed temporarily out of service for more than 8 hours and upon restoration of service.

Section 1001.5.6 "System maintenance" is added as follows:

**1001.5.6 System maintenance.** All individuals or companies installing, repairing, testing, servicing or maintaining sprinkler systems, fire hydrant systems, standpipes, fire alarm systems, portable fire extinguishes, smoke and heat ventilators, smoke-removal systems and other fire protection or extinguishing systems or appliances shall be a fire protection contractor or contractor licensed for said work by the State of California or have the appropriate license required by the California State Fire Marshal's Office or both.

The authority having jurisdiction shall be notified immediately when a fire protection or detection system or portion thereof is found inoperable.

The authority having jurisdiction shall be notified in writing within 72 hours by the person performing repairs, testing, or maintenance when a fire protection or detection system is not in compliance with applicable codes.

When changes involve shutting off water for a considerable number of sprinklers for more than 4 hours, temporary water supply connections shall be made to sprinkler systems so that reasonable protection can be maintained. Protection shall be restored each night in so far as possible. The Chief may require a fire watch while any system is inoperative.

When shorts, failures or other interruptions of service occur within a building's fire alarm system that connects to an approved alarm service provider's Type A (listed) Central Station or is a local alarm only, the Chief may require the system to be disconnected or shunt out the private fire alarm system and/or circuit. When shorts, failures, or other interruption of service occur within a building's fire alarm system that connects to an approved alarm service provider's Type A (listed) Central Station, the Chief may require the system to be repaired and written notification to be provided to the Chief before he or she responds to alarms generated by the system.

Where alarm system(s) are wholly or partially out of service for more than 8 hours, the alarm company having responsibility shall notify the fire dispatch center.

Section 1001.7.2.1 "Vehicle parking" is added as follows:

**1001.7.2.1 Vehicle parking.** It shall be an infraction to park, place or leave standing any unattended vehicle within 15 feet of any public or private fire hydrant along any public or private street or roadway.

**EXCEPTION:** If the vehicle is owned or operated by a fire department and clearly marked as a fire department vehicle.

Section 1001.8 is deleted.

Section 1001.10 Fire Appliances, is amended as follows:

**1001.10 Fire Appliances.** The Chief shall designate the type and number of fire appliances to be installed and maintained in and upon all buildings and premises within his/her jurisdiction. This shall be done according to the relative severity of probable fire, including the rapidity with which it may spread. Such appliances shall be of a type suitable for the probable class of fire associated with such buildings or premises and shall have the prior approval of the Chief. Extinguishers shall be installed on the hangers or in the brackets supplied, or mounted in approved fire extinguisher cabinets unless the extinguishers are of the wheeled type.

SECTION 1003 - FIRE-EXTINGUISHING SYSTEMS is amended as follows:

Section 1003.1.1 "General" is amended as follows:

**1003.1.1 General.** Fire-extinguishing systems shall be installed in accordance with the Building Code and Section 1003.

Fire hose threads used in connection with fire-extinguishing systems shall be National Standard hose thread or as approved.

The location of fire department hose connections shall be approved.

In buildings used for high-piled combustible storage, fire protection shall be in accordance with Article 81.

When required by the Chief, approved signs shall identify the building(s) or portions of buildings served by a fire department connection.

When required by the Fire Chief fire pumps shall be automatic.

Section 1003.2.2 "All Occupancies except Group R, Division 3 and Group U Occupancies" is amended as follows:

1003.2.2 All Occupancies except Group R, Division 3 and Group U
Occupancies. For Group R Division 3 occupancies see section 1003.2.10, for Group U
Occupancies see Section 1003.2.11. For all other occupancies, an automatic sprinkler system shall be installed and equipped with an electronic monitoring system as follows:

**EXCEPTION**: Non-combustible, detached canopies open on four sides not exceeding the basic allowable square footage in UBC Table 5B used exclusively for the parking or storage of private or pleasure vehicles and non-combustible storage (includes fuel islands).

1. In every story or basement of all buildings when the floor area exceeds 1,500 square feet (139.4 m2) and there is not provided at least 20 square feet (1.86 m2) of opening entirely above the adjoining ground level in each 50 lineal feet (15,240 mm) or fraction thereof of exterior wall in the story or basement on at least one side of the building.

Openings shall have a minimum dimension of not less than 30 inches (762 mm). Such openings shall be accessible to the fire department from the exterior and shall not be obstructed in a manner that firefighting or rescue cannot be accomplished from the exterior.

When openings in a story are provided on only one side and the opposite wall of such story is more than 75 feet (22,860 mm) from such openings, the story shall be provided with an approved automatic sprinkler system, or openings as specified above shall be provided on at least two sides of an exterior wall of the story.

If any portion of a basement is located more than 75 feet (22 860 mm) from openings required in Section 1007.3.2, the basement shall be provided with an approved automatic sprinkler system.

- 2. At the top of rubbish and linen chutes and in their terminal rooms. Chutes extending through three or more floors shall have additional sprinkler heads installed within such chutes at alternate floors. Sprinkler heads shall be accessible for servicing.
  - 3. In rooms where nitrate film is stored or handled. See also Article 33.
- 4. In protected combustible fiber storage vaults as defined in Article 2. See also Article 28.
- 5. In every new building where the total floor area exceeds 3,599 square feet (334.48 m2) or greater. See item #9 below. Nothing in this subsection shall preclude the use of fire resistive substitutions otherwise permitted under UBC Section 508. For Group R Division 3 occupancies see section 1003.2.10, for Group U Occupancies see Section 1003.2.11.
- 6. An automatic fire sprinkler system shall be installed in any portion of a building where there is a change of occupancy and the floor area of that portion of the building, which is changed, exceeds 3,599 square feet (334.48 m2). Refer to UBC Section 302.1 for accessory use.
- 7. An automatic fire sprinkler system shall be installed in every building when there is an addition to the floor area in existence on the effective date of this ordinance of 20 percent or more within a 12-month period and the aggregate floor area of the building exceeds 3,599 square feet (334.48 m2).
- 8. In existing buildings, other than one or two family dwelling units. An automatic fire sprinkler system shall be installed in any portion of an existing building, other than one or two-family dwelling units, where alterations or repairs within any 12-month period exceed fifty percent (50%) of the assessed value of the existing building or structure.
- 9. For the provisions of this section, two or more buildings existing entirely within the property lines of one parcel shall be considered a single building when exterior wall protection is not provided and the aggregate floor area exceeds 3,599 square feet (334.48 m2) when applying Uniform Building Code Section 503.3.

- 10. An automatic fire sprinkler system shall be installed in every new building of S-3 occupancy where the total floor area exceeds 2,999 sq ft. (278.72 M2) or greater.
- 11. For the provisions of this section, area separation walls shall not apply to eliminate the installation of a sprinkler system.

Section 1003.2.4.1 "General" is amended as follows:

**1003.2.4.1 General.** An automatic fire sprinkler system shall be installed throughout all buildings containing a Group E, Division 1 Occupancy.

**EXCEPTION:** 1. When each room used for instruction has at least one exit door directly to the exterior at ground level and when rooms used for assembly purposes have at least one half of the required exits directly to the exterior ground level, a sprinkler system need not be provided.

Section 1003.2.11 "Group R, Division 3 Occupancies" is added as follows:

**1003.2.11 Group R, Division 3 Occupancies.** An approved automatic fire sprinkler system shall be installed within all new R-3 occupancies when the total floor area (area under roof including garages and attached solid roof canopies) exceeds 5,999 sq. ft. and/or the total livable area (area not including garages and attached solid roof canopies) exceeds 4,999 sq. ft. As of April 1, 2004, all contractors for single-family homes and duplexes (R-3 Occupancies) shall provide an option for residential fire sprinklers. Prior to the prospective buyer signing a sales contract, the contractor or their agent shall obtain from the Fire Department an informational packet containing educational materials approved by the Fire Department, including a form explaining the option for residential sprinklers. The contractor or their agent shall provide the approved informational packet to any and all prospective buyers and require the execution of a signed receipt for the educational material from the prospective buyer. The contractor shall install residential fire sprinklers upon the request and execution of a purchase agreement by the homebuyer. The increased protection provided by fire sprinkler systems installed under the provisions of this subsection will be considered when determining the minimum acceptable requirements for, but not limited to the following:

- (1) One-hour fire resistive substitution.
- (2) Increase of one additional story from maximum heights established by Table 5B.
- (3) Exception to Required Fire Apparatus Access Roads as outlined in Article 9.
- (4) Exception to the Required Fire Flows as outlined in Appendix III-A of this code.

Section 1003.2.12 "Group U Occupancies" is added as follows:

**1003.2.12 Group U Occupancies.** Group U occupancies located within 6 feet (1828.8 mm) of sprinklered Group R Occupancy shall have fire sprinklers installed.

Section 1003.3.1 "Where required" is amended as follows:

**1003.3.1 Where required.** All valves controlling the water supply for automatic sprinkler systems and water-flow switches on all sprinkler systems shall be electronically monitored continuously and be capable of transmitting distinctly different signals for water-flow, valve supervision and trouble signals, to an approved alarm service provider, Type A (listed) Central Station.

## **EXCEPTION:**

- 1. Underground key or hub valves in roadway boxes provided by the municipality or public utility need not be supervised.
- 2. Sprinkler systems required to be installed in one and two family dwellings.

Section 1003.3.1.1 "Existing sprinkler systems" is added as follows:

**1003.3.1.1 Existing sprinkler systems.** All existing automatic sprinkler systems shall be monitored for water flow by an approved alarm service provider's Type A (listed) Central Station.

Section 1003.3.1.2 "Valves" is added as follows:

**1003.3.1.2 Valves.** When required by the Chief, valves controlling sprinkler systems shall be maintained in an open position by locking the valve open in an approved manner.

SECTION 1003.5 of the Uniform Fire Code is hereby amended by adding the following thereto:

**Fire control room.** An approved fire control room shall be provided for all buildings protected by an automatic fire extinguishing system. Said room shall contain all system control valves, fire alarm control panels and other fire equipment required by the Chief. Fire control rooms shall be located within the building at a location approved by the Chief, and shall be provided with a means to access the room directly from the exterior. Durable signage shall be provided on the exterior side of the access door to identify the fire control room.

EXCEPTION: Group R, Division 3 Occupancies.

SECTION 1006 - FIRE ALARM SYSTEMS is amended as follows:

1006.1.1 "Applicability" is amended as follows:

**1006.1.1 Applicability.** Installation and maintenance of fire alarm systems shall be in accordance with Section 1006.

Section 1006.2.4.1 "General" is amended as follows:

**1006.2.4.1 General.** Group E Occupancies shall be provided with fire alarm systems in accordance with Section 1006.2.4. Group E, Division 1 Occupancies and Group E, Division 3 Occupancies having an occupant load of 50 or more shall be provided with an approved automatic fire alarm system. When automatic sprinkler systems or smoke

detectors provided in accordance with Section 1006.2.4.2 are installed, such systems or detectors shall be connected to the building fire alarm system. See Section 1006.2.12. When more than one fire alarm control unit is used, they shall be interconnected and shall operate all indicating devices. Group E Occupancies with an occupant load of 50 persons or less shall have an early-warning device as approved by the fire authority having jurisdiction. Every public, private or parochial school building having an occupant load of 50 or more students or more than one classroom shall have a fire alarm system using the California Uniform Fire Code Signal outlined in the California Education Code, Section 32000 to 32004.

Section 1006.3.2.1 "Branch electrical circuits" is added as follows:

When providing a fire alarm circuit in a multiple occupancy type building (multiple metering), the circuit shall be energized from the house meter panel board.

When a separate source of power (i.e. emergency generator) is provided the fire alarm circuit shall be energized from the emergency panel board.

1006.3.3.6 "Monitoring" is amended as follows:

1006.3.3.6 Monitoring.

**1006.3.3.6.1 General.** Required alarm systems shall be monitored by an approved alarm service provider's Type A (listed) Central Station as established by Sacramento Regional Fire/EMS Communication Center.

The Central Station monitoring company or approved Alarm Company shall notify the authority having jurisdiction in writing, within 72 hours, of systems that are found not to be in compliance with applicable codes.

Receipt of supervisory signals by the monitoring company require the dispatch of a runner or maintenance person (arrival time not to exceed 1 hour), unless the condition can be restored to normal through the subscriber's efforts.

**1006.3.3.6.1.3 Multi-building or zone monitoring.** When a Central Station is monitoring more than one zone or building with a single retransmitter, the Central Station shall identify the particular zone or building or both that is in alarm, where required by the Chief.

Fire Alarm Panels installed at the protected premise shall be capable of differentiating between signals, including water flow, manual, and automatic activating components and transmitting distinctive fire alarm, supervisory and trouble signals.

**1006.3.3.6.1.4 Alarm transmission.** The activation of a fire sprinkler system, hood extinguishing system, special extinguishing system or a fire alarm/detection system shall cause the system to initiate a signal to the Central Station within 90 seconds. Retransmission from the Central Station to the Fire Dispatch Center shall not exceed 60 seconds.

**EXCEPTION:** Existing building without an alarm system which install hood

extinguishing systems or special extinguishing systems need not

be monitored.

**1006.3.3.6.2 Automatic telephone dialing devices.** Two separate telephone lines (numbers) shall be provided from the protected premises to the Central Station, which use Digital Alarm Communicator Transmitter (DACT). All costs regarding the installation, maintenance, and continuous operation of those lines shall be the responsibility of the building owner.

SECTION 1103 - COMBUSTIBLE MATERIALS is amended as follows:

SECTION 1103.3.5.5 "Outside Storage of Pallets and other Combustibles" is added as follows:

# 1103.3.5.5 Outside Storage of pallets and other combustibles.

The maximum single pile dimension for outside storage of pallets and other combustibles shall be 25ftx100ft or 2,500 sq. ft. The maximum pile height shall be 20 feet. Distance of piles to structures shall not be less then 10 feet.

Section 1103.3.6.1 "General" is amended as follows:

**1103.3.6.1 General.** Outside tire storage shall be in accordance with this section and Sacramento County Code 17.04.160.

## **1103.3.6.2 Individual Piles.** Is amended to read as follows:

Where tire storage is less than 500 units individual piles shall not exceed 2400 cubic feet (20x20x6) in volume. Where storage exceeds 500 units such storage shall be in accordance with NFPA 13.

Section 1103.3.6.3 "Separation" is amended as follows:

**1103.3.6.3 Separation.** A clear space of at least ten feet shall be maintained between piles. A clear space of ten feet shall be maintained between a face of any pile and a building or structure. A clear space of ten feet shall be maintained between a face of any pile and a property line. The clear space shall not contain any flammable/combustible material or vegetation.

**EXCEPTION:** An approved barrier wall may be substituted for clear space distance.

**1103.3.6.3.1 Height.** The height of storage piles shall be measured from surrounding grade. Tires shall not be stored below grade. Excavating for the purpose of below grade tire storage is prohibited.

**1103.3.6.3.2 Storage on Roofs.** Tires shall not be stored on roofs of buildings or structures.

- **1103.3.6.3.3 Level Surface.** Tire piles and tire storage shall be on a level surface.
- 1103.3.6.4 "Storage Sites" is added as follows:
- **1103.3.6.4 Outside Tire Rack Storage.** Outside tire rack storage shall not be located within 10 feet of any property line or building, and shall not exceed 6 feet in height when within 20 feet of any property line or building. Tire rack storage shall be in accordance with NFPA 231D.
  - 1103.3.6.5 "Miscellaneous Tire Storage" is added as follows:
- **1103.3.6.5 Miscellaneous Tire Storage.** On-tread storage piles, regardless of storage method, shall not exceed 25 feet in the direction of the wheel holes. On-ground, on tread storage shall not exceed 5 feet in height.
  - 11.03.3.6.6 "Tire Storage Aisles" hereby added as follows:
- **1103.3.6.6 Tire Storage Aisles.** The width of aisles between piles shall not be less than 8 feet regardless of storage method.
  - Section 1103.3.7 "Inside storage of tires" is added as follows:
- **1103.3.7 Inside Storage of Tires.** Inside tire storage shall be in accordance with Section 1103.3.7.
- **1103.3.7.2 Free-Standing Individual Tire Piles.** Tires stored on sidewalls shall not be higher than six feet. Tires stored in a laced pattern shall not be higher than 5 feet.
- **1103.3.7.3 Rack Storage of Tires.** A minimum of 3 feet of clearance from tire storage racks shall be maintained in all directions to roof structures, sprinkler deflectors, unit heaters, supply and return air duct registers, lighting fixtures, electrical outlets or any heat producing device.
- **1103.3.7.4 Inside Miscellaneous Tire Storage.** On-tread storage piles, regardless of storage method, shall not exceed 25 feet in the direction of the wheel holes. On-floor, ontread storage shall not exceed 5 feet in height.
- **1103.3.7.5** Inside Aisles Serving Tire Storage. The width of the main aisles between piles shall not be less than 8 feet. Any aisle other than the main aisles shall not be less that 4 feet in width.
- SECTION 1302 REPORTING OF EMERGENCIES AND FALSE ALARMS is amended as follows:
  - Section 1302.4 "Cost Recovery" is added as follows:

- **1302.4 Cost Recovery.** All costs incurred by the fire department related to any response to a false alarm may be charged to that person causing the transmission of the false alarm, or to that person's firm or corporation.
- SECTION 1303 EMERGENCY PLANS AND PROCEDURES is amended as follows:

Section 1303.1 "General" is amended as follows.

**1303.1 General.** Emergency plans, staff training and fire drills shall be provided when required by the Fire Chief in accordance with Section 1303. See also Appendix I-B.

SECTION 2401.1 "Scope" is hereby added as follows:

- **2401.1 Scope.** Airports, Heliports, Helistops and aircraft hangars shall be in accordance with:
  - 1. Article 24 of the Uniform Fire Code.
  - 2 California Code of Regulations Title 21, Sections 3525 through 3560 Airports and Heliports.
  - 3. Heliport Design Advisory Circular 150/5390-2A dated January 20<sup>th</sup>, 1994 by the U.S. Department of Transportation, Federal Aviation Administration.
  - 4. California Public Utilities Code, Sections 21001 et seq., relating to the State Aeronautics Act as prepared by the Aeronautics Program, M.S. #40 March 1998.
  - 5. Obstruction Marking and Lighting Advisory Circular AC 70/7460-1H as prepared by the Air Traffic Rules and Procedures Service, U.S. Department of Transportation, Federal Aviation Administration, Effective August 1, 1991.
  - 6. For the definition of Heliport, Helistop Un-designated, and Temporary Landing Area, see Article 2.

SECTION 2401.3 "Permits" is hereby added as follows:

- **2401.3 Permits.** For permits to operate airports, heliports and or helistops, or to use structures or enclosures for aircraft servicing or repair and aircraft fueling vehicles and for undesignated helistops, see Section 105.8. For helicopter lift permits see 105.8 h2.5.
  - 2401.3.1 "Helicopter Use Permit Requirements" is hereby added follows:
- **2401.3.1** Helicopter Use Permit Requirements. Any person, firm, or business requesting to land a helicopter at a site other than an approved airport or heliport as described by the Federal Aviation Administration F.A.R. Part 77, for the purpose of advertising, promotions, or rides whether for public or private use shall provide information required by the fire chief.

- 2401.9.1 "Fueling at Rooftop Heliports" is hereby added as follows:
- **2401.9.1 Fueling at Rooftop Heliports.** Fueling at rooftop, or elevated heliports/helipads shall not be permitted.
  - 2403.5.1 "Design" is hereby added as follows:

# 2403.5.1 Design.

- 1. Helistops shall be designed in accordance with Title 21, Division of Aeronautics, Subchapter 2 and the U.S. Department of Transportation Federal Aviation Administration Advisory Circular 150/5390-2, January 4, 1988.
- 2. Helistops shall be designed to support a minimum 10,000 pounds live load.
- 3. See Scope section 2401.1 of this code for additional design requirements.
- 4. Plans for helistops shall be submitted to the Fire chief for approval.

SECTION 2405.2 "Clearances" is hereby added as follows:

**2405.2 Clearances.** The dimensions of the Final Approach and Take Off Area, (FATO), and the Touch Down and Lift Off Area, TLOF, and the Safety Area are to be based upon requirements in the FAA Advisory Circular 150/5390-2A, Heliport Design.

SECTION 2405.3.1 "Fuel Containment" is added as follows:

**2405.3.1 Fuel Containment.** Helistops shall be provided with a fuel containment system capable of holding 200 gallons and shall be designed so that no fuel shall enter the building drain system. Materials, design and methods are subject to the approval of the Chief.

SECTION 2405.4 "Exits" is amended to read as follows:

# 2405.4 Exits.

- 1. At least two approved means of egress which are remotely located from each other shall be provided from the landing pad edge.
- 2. The exit path width of each exit path shall be a minimum of 3 feet.
- 3. The required width of exit paths shall not be obstructed by building structural elements.
- 4. The required width of exit paths shall not be obstructed by any machinery or equipment used or required to maintain or repair the building.

- 5. Exits from the helistop shall comply with the definition of exit found in Chapter 10 of the California Building Code.
- 6. Exit illumination in accordance with the Building Code shall be provided for the landing pad exits.

SECTION 2405.5 "Standpipe Systems" is hereby added as follows:

# 2405.5 Standpipe Systems.

- 1. A Class II standpipe system shall be provided on the exterior within 10 feet from of the helistop exit stairs.
- 2. See NFPA Standard 407 and 418.

SECTION 2405.9 "Requirements for Helicopter Lifts" is hereby added as follows:

**2405.9** Requirements for Helicopter Lifts. Use of an approved undesignated helistop by the permittee shall require a letter of authorization from the property owner, a congested area lift plan approved by the FAA, a narrative of the lift, a site plan, any required street closure permits, any required code enforcement special agreement or police officer contract and a certificate of insurance as required by Title 4 of the Sacramento Code.

SECTION 2902 - REPAIR GARAGES FOR LIQUID-FUELED AND LPG-FUELED VEHICLES is amended as follows:

Section 2902.7 "Gas Detection Systems" is added as follows:

**2902.7 Gas Detection Systems.** Repair garages used for the repair of LPG fueled vehicles shall be provided with an approved gas detection system.

SECTION 7801 - GENERAL is amended as follows:

Section 7801.1 "Scope" is amended as follows:

**7801.1 Scope.** Fireworks and temporary storage, use and handling of pyrotechnic special effects material used in motion pictures, television, and theatrical and group entertainment productions shall be in accordance with this article and local and state regulations.

Section 7801.3.1.2 "Displays" is amended as follows:

**7801.3.1.2 Displays.** Permits are required to conduct a fireworks display as required by local and state regulations. See Section 105, Permit f.2. Permit application shall be made not less that 14 days prior to the scheduled date of the display. The permit application shall include a diagram of the grounds on which the display is to be held showing the point at which the fireworks are to be discharged; the location of buildings, highways and other lines of communication; the lines behind which the audiences will be restrained; and the

location of nearby trees, telegraph or telephone lines and other overhead obstructions. At the time of permit application, the Chief shall be consulted regarding requirements for standby personnel and fire apparatus.

Section 7801.3.1.3 "Sales" is added as follows:

**7801.3.1.3 Sales.** Permits are required for the sale and display of "Safe and Sane" approved fireworks as permitted and regulated by Article 7 of Chapter 4.54 of the Sacramento County Code as presently constituted, and as hereinafter amended.

Section 7801.3.1.4 "Storage" is added as follows:

**7801.3.1.4 Storage.** Storage of fireworks is prohibited except by special permits as required by local and state regulations.

Section 7801.3.2 "Pyrotechnic special effects material" is amended as follows:

**7801.3.2 Pyrotechnic special effects material.** A permit is required to manufacture, compound, store or use pyrotechnic special effects material as required by local and state regulations. A permit for use shall be granted only to a licensed pyrotechnic operator. See Section 105, Permit p.3.

SECTION 7802 - FIREWORKS is amended as follows:

Section 7802.1 "General" is amended as follows:

**7802.1 General.** Storage, use and handling of fireworks shall be in accordance with local and state regulations.

Section 7802.2 "Seizure of Fireworks" is amended as follows:

**7802.2 Seizure of Fireworks.** The Chief is authorized to seize, take, remove or cause to be removed at the expense of the owner all stocks of fireworks offered or exposed for sale, stored or held in violation of local, state, or federal regulations.

Section 7802.3 "Prohibition" is deleted.

Section 7802.4.1 "General" is amended as follows:

**7802.4.1 General.** Fireworks displays shall be in accordance with local and state regulations.

Sections 7802.4.2 through 7802.4.9.8.10 are deleted.

SECTION 7803 - PYROTECHNIC SPECIAL EFFECTS MATERIALS is amended as follows:

Section 7803.1 "General" is amended as follows:

**7803.1 General.** Temporary storage, use and handling of pyrotechnic special effects material used in motion picture, television, theatrical and group entertainment productions shall be in accordance with local and state regulations. Permanent storage of pyrotechnical special effects materials shall be in accordance with Article 77.

Sections 7803.2 through 7803.8.4 are deleted.

SECTION 7902 - STORAGE is amended as follows:

Section 7902.1.7.4.1 "General" is amended by adding subsection 6 as follows:

6. Unless permitted by the Chief, tank(s) shall not be disassembled by any removal method at the site.

Section 7902.2.4.1 "Required Systems" is amended as follows:

- **7902.2.4.1 Required systems.** Foam fire protection shall be provided for above ground tanks, other than pressure tanks operating at or above 1 psig (6.89 kPa), when such tank, or group of tanks spaced less than 50 feet (15,240mm) apart measured shell to shell, has a liquid surface area in excess of 1,500 square feet (139.4 m2), and is:
  - 1. Used for the storage of Class I or II Liquids,
  - 2. Used for storage of crude oil,
- 3. Used for in-process products and is located within 100 feet (30,480 mm) of a fired still, heater, related fractioning or processing apparatus or similar device at a processing plant or petroleum refinery as herein defined, or
- 4. Considered by the Chief as presenting an unusual exposure hazard because of topographical conditions; nature of occupancy, proximity on the same or adjoining property, and height and character of liquids to be stored; and degree of private fire protection to be provided and facilities of the fire department to cope with flammable liquid fires.

SECTION 8001 - GENERAL is amended as follows:

Section 8001.12.3.8 "Parking and garaging" is added as follows:

**8001.12.3.8 Parking and garaging.** Vehicles containing hazardous materials in amounts that require placarding under state or federal law and possessing the physical hazards listed in Section 8002.2 shall not be left unattended on any residential street; nor in or within 500 feet of any residential area, apartment or hotel complex, educational, hospital or care facility at any time; or at any place that would, in the opinion of the Chief, present a life or safety hazard.

SECTION 8206 - DISPENSING AND OVERFILLING is amended as follows:

Section 8206.4 "Tank Vehicle, Tank Car, and Pipelines" is added as follows:

**8206.4 Tank Vehicle, Tank Car, and Pipelines.** A qualified attendant shall be present at all times while a tank vehicle or tank car is discharging cargo. Whenever practicable, the tank vehicle or tank car shall be positioned so that the operating controls and the discharging end of the hose or hoses are both in view of the attendant.

SECTION 9002 - UFC STANDARDS is amended as follows:

Section 9002 is amended by amending Uniform Fire Code Standard 79-6:

**Standard 79-6, Section 7902.6.10 Underground Tank.** An access opening shall exist to recertify a tank. Cutting or lining of tanks by any means is prohibited. Before opening the tank, testing for vapors shall be done by inserting the meter probe into the hole to verify that the vapor concentration does not exceed 10 percent of the lower flammable limit.

**Standard 79-6, Section 79.603.2.1 Qualifications.** Openings shall not be cut by any means in tanks for entry for inspection purposes.

Appendix II-C "Marinas", is amended as follows:

SECTION 3 - PERMITS is amended as follows:

Permits are required to use open-flame devices for maintenance or repair on vessels, floats, piers or wharves.

Permits are also required to use portable barbecues, braziers or cooking devices on vessels, floats, piers or wharves.

A permit is required to operate a marina. See Section 105, Uniform Fire Code.

SECTION 4 – DEFINITIONS is amended as follows:

**MARINA** shall include covered piers, wharves, and floats that are commercially operated with facilities for mooring or servicing five or more vessels.

SECTION 6 - FIRE PROTECTION EQUIPMENT is amended by adding the following:

- **6.1.1 Automatic fire sprinkler system.** A fire sprinkler system shall be provided for all covered floats, marinas, piers, and any/all other covered floating structures that are commercially operated and exceeds 3,599 sq. ft (334.48 m2).
- **6.3.1 Access points.** Marinas shall be accessible for firefighting purposes by not less than two approved access points. Access locations shall be determined by the Fire Chief.

**6.5 Testing.** Testing and maintenance of water based fire protection systems at marinas shall be in accordance with National Fire Protection Association Standard 25 13 and Title 19, California Code of Regulations, Chapter 5.

## SECTION 9 - EXITING is added as follows:

Exiting for marinas and areas serving marinas shall be of an arrangement and dimension to accommodate the total occupant load of all occupancies located at or on marinas or wharves. Exiting shall be provided in accordance with the Uniform Building Code.

Appendix III-A, SECTION 4 - FIRE-FLOW REQUIREMENTS FOR BUILDINGS is amended as follows:

**4.2. Buildings other than One- and Two-Family Dwellings.** The minimum fire flow and flow duration for buildings other than one- and two-family dwellings shall be as specified in Table A-III-A-1.

#### **EXCEPTION:**

- 1. A reduction in required fire flow of up to 50 percent, as approved by the Chief, is allowed when the building is provided with an automatic sprinkler system approved pursuant to the adopted NFPA Standards. The resulting fire flow shall not be less than 1500 gallons per minute (5677.5 L/min.). Reduction of fire flow does not apply to number of fire hydrants required or duration of fire flow required.
- 2. A reduction in required fire flow of up to 75 percent, as approved by the Chief, for warehouse buildings of Type I, Type II, and Type III-N construction and provided with early suppression fast response fire sprinkler systems. Reduction of fire flow does not apply to number of fire hydrants required or duration of fire flow required.

Appendix III-B, SECTION 4 - CONSIDERATION OF EXISTING FIRE HYDRANTS is amended as follows:

# **SECTION 4 - CONSIDERATION OF EXISTING FIRE HYDRANTS**

- **4.1** Existing fire hydrants on public streets are allowed to be considered as available. Existing fire hydrants on adjacent properties shall not be considered available unless fire apparatus access roads extend between properties and easements are established to prevent obstructions of such roads.
- **4.2** Existing single outlet 2 1/2 inch hydrants shall be changed to an approved steamer style hydrant, when a tentative subdivision or parcel map, merge of lots, change of use or change in intensity of use of an existing building, expansion of an existing structure, or construction increases the required fire flow.

- **4.3** Where water main improvements are required to meet GPM flow and the existing water main has a single 2 1/2 inch outlet fire hydrant, an upgrade of hydrants will be required.
- **4.4** Existing hydrants affected by right of way improvements shall be moved to an approved location at no cost to the fire authority.

Appendix III-B, TABLE NO. A-III-B-1, NUMBER AND DISTRIBUTION OF FIRE HYDRANTS is amended as follows:

TABLE NO. A-III-B-1
NUMBER AND DISTRIBUTION OF FIRE HYDRANTS

FIRE FLOW REQUIREMENT (gpm)	MINIMUM NO. OF HYDRANTS	AVERAGE SPACING BETWEEN HYDRANTS 1,3,& 4 (Ft.)	MAXIMUM DISTANCE FROM HYDRANT TO ANY POINT ON STREET OR ROADWAY FRONTAGE <sup>3</sup> (Ft.)
1750 or less	1	300	150
2000-2250	2	300	150
2500	3	300	150
3000	3	300	150
3500-4000	4	300	150
4500-5000	5	300	150
5500	6	300	150
6000	6	250	150
6500-7000	7	250	150
7500 or more	8 or more <sup>2</sup>	200	120

<sup>&</sup>lt;sup>1</sup>Reduce by 150 feet for dead-end streets or roadways.

Appendix III-B, SECTION 6, HYDRANT TYPE is added as follows:

## **SECTION 6 - HYDRANT TYPE**

<sup>&</sup>lt;sup>2</sup>One Hydrant for each 1000 gpm or fraction thereof.

<sup>&</sup>lt;sup>3</sup>Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants should be provided at not less than 1000 foot (305 m) spacing to provide for transportation hazards. In addition, there shall be at least one hydrant at each intersection.

<sup>&</sup>lt;sup>4</sup>Average spacing between hydrants may be extended to 500 feet on streets serving one and two family dwellings.

The Chief shall approve the type of fire hydrants to be installed in public right of way or on private property prior to any such installation.

Appendix III-B, SECTION 7, HYDRANTS - BOTH SIDES OF A STREET is added as follows:

# SECTION 7 - HYDRANTS - BOTH SIDES OF A STREET

Hydrants shall be required on both sides of the street whenever one or more of the following conditions exist:

- 1. Streets have median center dividers that make access to hydrants difficult, cause time delay, or create undue hazard or both.
  - 2. When there are four or more lanes of traffic.
  - Width of street in excess of 88 feet.
- 4. The existing street being widened or having a raised median center divider in the future pursuant to the General Plan Roadway Improvement Plans for the County of Sacramento.

Appendix IV-B, SECTION 3, FLAME RETARDANCE is amended as follows:

Trees shall be properly treated with an approved flame retardant.

#### **APPENDIX VII**

#### **EMERGENCY ACCESS GATES AND BARRIERS**

(See UFC Section 902.2.4.2)

#### **SECTION 1 - SCOPE**

Where a new gate or barrier is installed on a fire access roadway, it shall be authorized by the Chief and meet the minimum requirements of Appendix VII. Private driveways on lightly traveled streets as determined by the Sacramento County, Department of Transportation or the appropriate public works agency having jurisdiction, serving one single-family residence may be exempt from the scope of this document.

## **SECTION 2 - DEFINITIONS**

For the purposes of APPENDIX VII, certain terms are defined as follows:

**100% CONCURRANCE OF PROPERTY OWNERS** will consist of a signed, notarized copy of Appendix VII - Form A, Emergency Access Gates and Barriers, by each property owner served by the gate;

**AUTHORITY HAVING JURISDICTION** is any agency having statutory authority to enforce federal, state, county, city, or district laws, ordinances or standards;

**GATES AND BARRIERS** – shall mean a gate, crossbar, door or other obstructive device which is utilized for the purpose of restricting, controlling or obstructing entry or exit by motor vehicles or pedestrians to or from a private roadway and which is not manned on a twenty-four hour, seven day per week basis by a person capable of providing immediate access to a police or fire safety vehicle or person;

**PRIVATE STREET OR ROADWAY** – shall mean any roadway (not dedicated as public right-of-way) that is owned and maintained by abutting property owners, or association of property owners that is utilized for the purpose of providing vehicular or pedestrian access to a subdivision, apartment complex, condominiums or other residential development or wild land, excluding off-street parking areas, driveways, and driveways to off-street parking areas.

**PRIVATE DRIVEWAY** -- A private way for vehicular travel that provides access from an off-street parking area to a public or private drive.

ULTIMATE EDGE OF RIGHT-0F-WAY is the line furthest from the centerline of the street that has been approved by the County and recorded on the parcel map for existing or future street improvements.

## **SECTION 3 - PERMIT**

A permit issued by the fire authority having jurisdiction to design and install any secured access gate system shall be obtained and approved in writing prior to installation.

# **SECTION 4 - REQUIRED SUBMITTAL LOCATIONS**

- **4.1 Unincorporated areas of the county.** Approvals are required from the five (5) agencies having jurisdiction over the installation of gates & barriers. A total of eight (8) sets of information will be required to be submitted at the 1<sup>st</sup> office. All copies returned to the applicant shall have the approval stamp and signature of the plan review officer prior to taking them to the next office. Following the agencies, copies will be provided as noted. Each office will retain one copy for their records. Submittals for applications to install gates or barriers shall be in the following order:
- **4.1.1 1**<sup>st</sup> **Office: Department of Transportation,** Sacramento County, 906 G Street, Sacramento, CA 95814; (916) 874-5374.
- **4.1.2** 2<sup>nd</sup> Office: Planning Department, Sacramento County, 827 7<sup>th</sup> Street, Room 101, Sacramento, CA 95814; (916) 874-6141
- **4.1.3** 3<sup>rd</sup> Office: County Sanitation District 1, 10545 Armstrong Ave., Suite 101, Mather, CA 95655; (916) 876-6094
- **4.1.4 4<sup>th</sup> Office: Sheriff's Department**, Sacramento County, Community Development Assistant Planner, Community Oriented Policing Strategies Division, 4221 North Freeway Blvd, Suite A-1, Sacramento, CA 95834; (916) 874-5986
- **4.1.5 5**<sup>th</sup> **Office: The Fire Prevention Bureau** of the fire district/department having jurisdiction:
  - a. Areas under the jurisdiction of the City of Sacramento outside the incorporated city shall be submitted to the City of Sacramento, Fire Prevention Office, 1231 I Street, Suite 401, Sacramento, CA 95814; (916) 264-5260.
  - b. Courtland Fire District; (916) 775-1210
  - c. Delta Fire District; (707) 374-2233
  - d. Elk Grove unincorporated areas: Elk Grove Fire Dept., 8820 Elk Grove Blvd., No. 2, Elk Grove, CA 95624
  - e. Galt Fire District, Fire Prevention, 208 A St., Galt, CA 95632; (209) 745-1001
  - f. Herald Fire District; (209) 748-2322
  - g. Isleton Fire Protection District, 100 Second Street, Isleton, CA 95641; (916) 777-7776
  - h. Sacramento Metro Fire District, 3012 Gold Canal Drive, Rancho Cordova, CA 95670; (916) 942-3300.
  - i. Walnut Grove Fire District; (916) 776-1090
  - j. Wilton Fire District; (916) 687-6920
- **4.1.5 5th Office: The Sacramento County Building Dept.**, 4101 Branch Center Road, Sacramento, CA 95827; (916) 875-5400 A Miscellaneous Electrical Permit is required for all electrical gate installations.

# 4.1.6 Provide copies to:

a. The property owner or Association (1 Copy)

- b. The electrical contractor (1 Copy)
- c. The gate contractor (1 Copy)
- **4.2 Incorporated areas of the county (Cities) –** Applications for gates within incorporated areas shall be submitted to the city locations listed below or as directed by their information services. Do not begin the process at the County Transportation Office.
- **4.2.1 Citrus Heights.** Plans for the City of Citrus Heights shall be submitted to the Sacramento Metropolitan Fire District, 3012 Gold Canal Drive, Rancho Cordova, CA 95670 (916) 942-3300.
- **4.2.2 Elk Grove**. Plans for the City of Elk Grove shall be submitted to Elk Grove Fire Dept., 8820 Elk Grove Blvd., No. 2, Elk Grove, CA 95624
- **4.2.3 Galt.** Plans for the City of Galt shall be submitted to Galt Fire District, Fire Prevention, 208 A St., Galt, CA 95632; (209) 745-1001.
- **4.2.4 Folsom.** Plans for the City of Folsom shall be submitted to the City of Folsom, Planning, Inspections and Permitting Dept., 50 Natoma St., Folsom, CA 95630; (916) 355-7222.
- **4.2.5 Rancho Cordova.** Plans for the City of Rancho Cordova shall be submitted to the Sacramento Metropolitan Fire District, 3012 Gold Canal Drive, Rancho Cordova, CA 95670 (916) 942-3300.
- **4.2.6 Sacramento.** Plans for the City of Sacramento shall be submitted to the City of Sacramento, Fire Prevention Office, 1231 I Street, Suite 401, Sacramento, CA 95814; (916) 264-5260.

### **SECTION 5 - SUBMITTALS**

A minimum of eight (8) complete sets of information shall be submitted to the Department of Transportation or the appropriate public works agency having jurisdiction and shall include the following:

- **5.1 Approved verification of 100% Concurrence of Property Owners.** The applicant shall provide, with the gate application, verification that all existing property owners served by gate installation agree to its installation and operation. Each property owner shall provide a signed copy of the agreement noted as Appendix VII, Form A Emergency Access Gates and Barriers (at the end of this document). In addition, the applicant shall provide a copy of the amended "Road Maintenance Agreement" identifying the addition of the gates and operating systems. Where there is only one property owner, Appendix VII, Form A Emergency Access Gates and the property owner and the gate contractor must sign Barriers.
- **5.2** A site plan of the property and a site detail of each gate location, drawn to scale (1"=10', 1"=20', or 1"=40'), indicating or showing:
  - a. Approval stamps from the Department of Transportation, the Planning Department and the Sheriff's Office or Police Department;
  - b. C-10 electrical contractors stamp on the plans for the electrical installation;
  - c. C-13 fence contractors stamp on the plans for the installation of the gate;

- d. Plans for gates over 6 feet in height shall bear the stamp of a structural engineer and must be accompanied by a Sacramento County Building Permit Number.
- e. Contractors company name, address, phone number and contact person.
- f. Exact locations of the entry to the property (i.e. On the east side of Fulton Ave, 620 feet north of the center of Marconi Ave. in the Sacramento area);
- g. Assessors Parcel Number (located on the property owners tax bill);
- h. Property Lines;
- i. Fire Hydrants, fire department connections;
- Location of the "ultimate back of right-of-way";
- k. Location of the existing edge of pavement or gutter line;
- I. Building footprints, including doors, walkways and fire control room doors; parking spaces and landscape affected;
- m. Proposed fence, pedestrian gates, vehicle gates;
- n. Existing vehicular access;
- o. Proposed location of Knox® key switch / Knox® box(s);
- p. Physical address and;
- **5.3 Product specifications** shall be provided that include:
  - a. Method of operation;
  - b. UL listing numbers of equipment used and;
  - c. Manufacturers specification sheets for electrical gate controller.
- **5.4 Maintenance.** Emergency access gates and barriers shall be maintained and may include:
- 1. Batteries required for operation of the system during power failure;
  - b. Lubrication of moving parts and hinges per manufacturers specifications and;
  - c. Any subsequent attention required to maintain the original list of frequencies for emergency operation of the gate in the controller.
- **5.5** Plan review and inspection fees will be collected per each agency's approved fee schedule.

## **SECTION 6 - MINIMUM REQUIREMENTS**

# 6.1 Vehicle Gates – See Attached Layouts

#### 6.1.1 Access

- a. All gates shall be UL 325 compliant.
- b. Gates shall not be installed within a required turning radius of a fire access roadway.

- c. Access for single direction traffic shall be unobstructed 16 feet wide and 13', 6" high.
- d. Access for bi-directional traffic shall be unobstructed 20' wide and 13', 6" inches high.
- e. Swinging gates for single direction traffic shall swing in the direction of vehicle travel.
- f. Swinging gates for bi-directional traffic shall swing into the property being entered.
- g. Locations of gates shall be as approved by the Sacramento County, Department of Transportation or the appropriate public works agency having jurisdiction, on a caseby-case basis. To find out where the ultimate edge of right-of-way is, contact Sacramento County, Land Division & Site Improvement Review, 827 7th Street, Room 102-105, Sacramento, CA 95814, (916) 874-6591 or the public works agency having jurisdiction.
- h. All gates shall be accessible from the driving lane nearest the edge of the street by turning radii of at least 38' inside and 58' outside.
- i. After passing through a gate, the nearest curb of any cross street shall be no less than 40 feet.
- j. **Private driveways** serving one single-family residence on moderate and heavily traveled streets shall:
  - 1. Meet the setback requirements of this appendix. If existing conditions prevent gate installation with 40' of clearance to the face of the gate, a letter documenting an acceptable alternative that would facilitate emergency ingress without endangering emergency response personnel and apparatus will be required for review and approval by the Chief;
  - 2. Meet the operational requirements of electrically operated gates.

## 6.1.2 Operation of Gates

- a. All gates shall be electrically operated for entry and exit by an approved fire department method:
  - 1. Key override switch (Knox®), and
  - 2. Radio operated controller (Click2Enter© or other approved equipment), or
    - **Exception**: Radio controlled exit may be waived by installation of a "free exit" loop.
  - 3. Opticom transmitter

**NOTE**: Incorporated cities may have additional requirements.

- b. Gates requiring radio-controlled access shall be provided with an approved 2 inch by 2 inch, blue, reflective marker visible to approaching traffic. It shall be located in the center of the exit gate.
- c. Wiring for electrical gates shall be provided by AC current, underground installation. A miscellaneous electrical permit is required by the Sacramento County Building Department.

- d. Electrically operated gates shall fail to the open position when the power is off. They shall remain open until power is restored.
- e. Knox® Company authorization forms are required for orders of key switches, boxes and padlocks. The forms may be obtained by calling the fire authority having jurisdiction or the Sacramento County Sheriff's Office.
- **6.1.2.1 Manual gates or barriers** may be approved on a case-by-case basis for nighttime security of business property or access to wild lands.
  - a. They shall be constructed in a manner that reflects good construction practices acceptable to the fire authority having jurisdiction.
  - b. They shall be accessible by means of an approved fire department padlock (Knox®) or by the installation of an approved key box (Knox®).
  - c. Approved manual gates or barriers across emergency access roadways shall be provided with an 18-gauge metal sign in the center of and on both sides of the gate that shall read, "FIRE LANE- NO PARKING". Letters shall be red on a white background and be a minimum of 3" high with a ½" stroke.
  - d. Gates to close off a fire lane behind strip malls/stores in order to minimize dumping and vandalism shall be approved with (Knox®) padlock access.

#### 6.1.3 Prohibitions

- a. No gate shall be installed where access requires the use of a proximity reader or card, unless a "turn-out" is provided for its use.
- b. Direction-limiting devices, such as fixed tire spikes, are prohibited.
- c. The total number of vehicle access control devices or systems, through which emergency vehicles must pass to reach any address shall **not** exceed one.
- d. No commercial property owner shall install fences and gates where more than one gate must be opened in order to reach within 150 feet of the rear portion of any building.

## 6.2 Pedestrian Gates

All vehicle gates obstructing pedestrian access to a public way (street) shall have an approved pedestrian gate installed within 10 feet of the vehicle gate.

- a. Gates shall be handicap accessible and comply with exit door requirements of the Uniform Building Code.
- b. An approved key box (Knox®) shall be installed at least 48" above grade on the outside of the gate. It shall be provided with a key to open the pedestrian gate.
- c. No pedestrian gate shall be located in the median between two vehicle gates.

Exception: Private driveways serving one single-family residence are exempt from this requirement.

# **SECTION 7 - INSTALLATION APPROVAL**

The fire authority having jurisdiction shall inspect all gates for proper installation and operation prior to activation or use.

# **SECTION 8 - ADDITIONAL REQUIREMENTS**

Because of the delays caused by vehicle access control devices or systems, additional fire protection requirements may be applied based on other access limitations, such as narrow or winding streets, or dead-end streets without an approved turnaround available for fire apparatus.

Other than the obstruction and the reduced width controlled within this standard, no other requirement of the fire authority having jurisdiction shall be adversely affected by the placement of any vehicle access control device or system in any required fire apparatus access road.

Fire department approval does not waive any requirement by other authorities having jurisdiction.

## APPENDIX VII

# FORM A – EMERGENCY ACCESS GATES AND BARRIERS

## UNDERSTANDING AND AGREEMENT

I/we understand and agree with the conditions of Appendix VII, Form A – Emergency Access Gates and Barriers, to install and maintain controlled access to the private street/roadway shown on the attached plans including the parcel number listed below. I/we understand that FAILURE TO COMPLY with any condition herein shall constitute a violation of UFC Section 902.2.4.2 and is grounds for immediate revocation of this permit to have a security gate or barrier. I/we also understand that once the gate system is approved and activated, it shall not be tampered with, without the written approval of the fire department and sheriff's department except by authorized maintenance personnel.

I/WE HAVE READ, UNDERSTAND AND AGREE TO COMPLY WITH ALL CONDITIONS HEREIN.

Gate Contractor:	 Date:	
Property Owner:	 Date:	
Parcel Number:		
Final Inspection Approval By:	Date:	
Agency:		

(A signed fire department inspection card may substitute final approval.)

Appendix V-A, NATIONALLY RECOGNIZED STANDARDS OF GOOD PRACTICE is amended as follows:

NATIONAL FIRE PROTECTION ASSOCIATION Batterymarch Park, Quincy, MA 02269

NFPA National Fire Codes, the edition listed in the 2002 May Meeting Numerical Edition dated 05/02 (see Appendix XIII) of the code shall apply.

All NFPA Standards shall be adopted except:

11C	13E	13R	297	473	550	902	1001	1002	1003	1021	1031
1033	1035	1041	1201	1221	1402	1404	1405	1410	1500	1561	1581
1901	1911	1914	1931	1932	1971	1975	1981	1982	1983	1999	1710
1720											

Appendix VI-E MODEL CITATION PROGRAM is amended to delete pages 1-337 to 1-343, and amend Figure A-VI-D-5 page 1-344:

# UNIFORM FIRE CODE BAIL SCHEDULE

SECTION	NATURE OFFENSE	OF	PC	MA	BAIL PA	NCA	TOTAL
103.4.3.1*	NC W/ORDERS ( NOTICE	OR	Χ		\$1000	\$1700	\$2700
103.4.3.2*	NC W/CONDEMNATI TAG	ION	Χ		\$1000	\$1700	\$2700
103.4.3.3*	DESTRUCTION (	OF	Χ		\$1000	\$1700	\$2700
103.4.4*	CONTINUANCE HAZARD	OF	Χ		\$1000	\$1700	\$2700
ALL OTHER SECTIONS			Х		\$100	\$170	\$270

\* - MISDEMEANOR
PC - ELIGIBLE FOR PROOF OF CORRECTION
MA - MANDATORY APPEARANCE
PA - PENALTY ASSESSMENT
NCA - NIGHT COURT ASSESSMENT
NC - NONCOMPLIANCE

**17.04.110 High Explosives.** In accordance with the provisions of Division 11, EXPLOSIVES, Part 1, HIGH EXPLOSIVES, of the Health and Safety Code (Sections 12000, 12401), the Sheriff shall have the primary responsibility for the enforcement of the provisions therein.

Wherever there appears in the 2000 edition of the Uniform Fire Code any rule, regulation or provision that is in conflict with the Health and Safety Code, such rule, regulation or provision is hereby repealed.

# 17.04.120 Public Safety 800mhz Radio Building Amplification System.

- (a) GENERAL. Except as otherwise provided, no person shall erect, construct, change the use of or provide an addition of more than 20% to any building or structure or any part thereof, or cause the same to be done which fails to support adequate radio coverage for Sacramento Regional Radio Communications System, including but not limited to firefighters and police officers. For purposes of this section, adequate radio coverage shall include all of the following: 1) a minimum signal strength of -95 dBm available in 90% of the area of each floor of the building when transmitted from the closest Sacramento Regional Radio Communications System site; 2) a minimum signal strength of –95 dBm received at the closest Sacramento Regional Radio Communications site when transmitted from 90% of the area of each floor of the building; 3) the frequency range which must be supported shall be the current band of frequencies used by either City or County systems; and 4) a 100% reliability factor. When measuring the performance of a bi-directional amplifier, signal strength measurements are based on one input signal adequate to obtain a maximum continuous operating output level.
- (b) **Amplifications Systems Allowed.** Buildings and structures, which cannot support the required level of radio coverage shall be equipped with wither a radiating cable system or an internal multiple antenna system with or without FCC type accepted bi-directional amplifiers as needed. If any part of the installed system or systems contains an electrically powered component, the system shall be capable of operating on an independent battery and/or generator system for a period of at least 12 hours without external power input. The battery system shall automatically charge in the presence of an external power input. If used, bi-directional amplifiers shall include filters to reduce adjacent frequency interference. These filters shall be tuned so that they will be 35 db below the SRRCS frequencies.

# (c) Testing Procedures.

Acceptance Test Procedure. When an in-building radio system is required, and upon completion of installation, it will be the building owner's responsibility to have the radio system tested to ensure that twoway coverage on each floor of the building is a minimum of 90%. Each floor of the building shall be divided into a grid of approximately 20 equal areas. A maximum of 2 non-adjacent areas will be allowed to fail the test. In the event that 3 of the areas fail the test, in order to be more statistically accurate, the floor may be divided into 40 equal areas. In such event, a maximum of 4 nonadjacent areas will be allowed to fail the test. After the 40-area test, if the system continues to fail, the building owner shall have the system altered to meet 90% coverage requirement. The test shall be conducted using a Motorola MTS 2000, or equivalent portable radio, talking through the Sacramento Regional Radio Communications System (SRRCS) as specified by the authority having jurisdiction. A spot located approximately in the center of a grid area will be selected for the test, then the radio will be keyed to verify two-way communications to and from the outside of the building through the SRRCS. Once the spot has been

selected, prospecting for a better spot within the grid area will not be permitted. The gain values of all amplifiers shall be measured and the test measurement results shall be kept on file with the building owner so that the measurements can be verified each year during the annual tests. In the event that the measurement results become lost, the building owner will be required to rerun the acceptance test to re-establish the gain values.

As part of the installation, a spectrum analyzer or other suitable test equipment shall be utilized to insure that spurious oscillations are not being generated by the subject bi-directional amplifier (BDA) due to coupling (lack of sufficient isolation) between the input and output systems. This test will be conducted at time of installation and subsequent annual inspections.

- 2. **Annual Tests.** When an in-building radio system is required, the building owner shall test all active components of the system, including but not limited to amplifiers, power supplies and backup batteries, a minimum of once every 12 months. Amplifiers shall be tested to ensure that the gain is the same as it was upon initial installation and acceptance. Backup batteries and power supplies shall be tested under load for a period of 1 hour to verify that they will properly operate during an actual power outage. If within the 1-hour test period, in the opinion of the testing technician, the battery exhibits symptoms of failure, the test shall be extended for additional 1-hour periods until the testing technician confirms the integrity of the battery. All other active components shall be checked to determine that they are operating within the manufacturer's specifications for the intended purpose.
- 3. **Five-Year Tests.** In addition to the annual test, the building owner shall perform a radio coverage test a minimum of once every 5 years to ensure that radio system continues to meet the requirements of the original acceptance test. The procedure set forth above shall apply to such tests.
- 4. Qualifications of Testing Personnel. All tests shall be conducted, documented and signed by a person in possession of a current FCC license, or a current technician certification issued by the Associated Public Safety Communications Officials International (APCO) or the Personal Communications Industry Association (PCIA). All test records shall be retained on the inspected premises by the building owner and a copy submitted to the fire department officials.
- D. **Field Testing.** Police and fire personnel, after providing reasonable notice to the owner or his representative, shall have the right to enter onto the property to conduct field-testing to be certain that the required level of radio coverage is present.
- E. **Exemptions.** This section shall not apply to buildings less that 5000 square feet or any R-3 occupancy. (Ord. 908 § 7 (part), 1999)

17.04.130 Flammable And Combustible Liquids And Liquified Petroleum Gases. Permits. Applications for permits for the installation or modification of above ground tanks for the storage of flammable and combustible liquids shall be made to the Building Inspection Division of Sacramento County, and the fire department having jurisdiction.

Files, records, and copies of all permits shall be kept in the Building Inspection Division and will be available on request. The Building Inspection Division shall instruct the applicant as to the necessity of also obtaining concurrent approval from the fire department for issuance of a permit.

Applicants for permits for the installation or modification of underground tanks for the storage of hazardous materials, including flammable and combustible liquids, shall be made to the Environmental Health Branch of Sacramento County, and the fire department having jurisdiction. Files, records, and copies of all permits shall be kept in the Environmental Health Branch and will be available on request. The Environmental Health Branch shall instruct the applicant as to the necessity of also obtaining concurrent approval from the fire department for issuance of a permit.

Applications for permit for the installation or modification of liquefied petroleum gases shall be made to the Building Inspection Division of Sacramento County, and the fire department having jurisdiction, whose decisions shall be final.

17.04.140 Structural Fires. The Chief shall notify all occupants or owners of structures, which have suffered damage by fire, that such structures or buildings must be inspected before any repairs thereto are made. A permit covering the structural, electrical and plumbing repairs shall be obtained from the County Building Inspection Division. The Chief shall report all such structural fires to the County Building Inspection Division on a form prescribed by the Division within twenty-four hours after the occurrence of such fire.

**17.04.160 Repeal Of Conflicting Ordinances.** All former fire prevention ordinances or parts thereof conflicting or inconsistent with the provision of this ordinance or of the code hereby adopted are hereby repealed.

**17.04.170 Validity.** The Board of Supervisors hereby declares that should any section, paragraph, sentence, or word of this ordinance or of the code hereby adopted bye declared for any reason to be invalid, it is the intent of the Board that it would have passed all other portions of this ordinance independent of the elimination therefrom of any such portion as may be declared invalid.

SECTION 3. In connection with the amendments enacted by Section 2 relating to the Uniform Fire Code and its appendix, 2000 Edition, the Board of Supervisors makes the following findings pursuant to Health and Safety Code Section 17958.5, 17958.7 and 18941.5.

The changes are reasonably necessary because of local climatic, topographical

or geological conditions.

The Board of Supervisors hereby adopt pursuant to Section 18941.5 of the California Health and Safety Code, the following findings of fact:

- established which are more restrictive of nature than those adopted by the State of California (State Buildings Standards Code, State Housing & Community Development Codes) commonly referred to as Title 24 & Title 25 of the California Code of Regulations. These amendments to the California Fire Code 2000 Edition, have been recognized by Sacramento County to address the fire problems, concerns and future direction by which the County can establish and maintain an environment which will afford a level fire and life safety to all who live and work within its boundary.
- (b) The Western Fire Chiefs Association has assumed responsibility for the Uniform Fire Code and Uniform Fire Code Standards. The Western Fire Chiefs Association provided a means for participation by all code enforcement officials from throughout the country as well as industry representatives, consultants, and other private parties with an interest in the Uniform Fire Code.
- (c) The Uniform Fire Code, being the 2000 edition thereof, published by the Western Fire Chiefs Association nationally recognized compilation of proposed rules, regulations and standards of said Association.
- (d) Said Uniform Fire Code has been printed and published as a Code in book form within the meaning of Section 50022.1 of the Government Code of the State of California.
- (e) Under the provisions of Section 18941.5 of the Health and Safety Code, local amendments are based on climatic, topographical and geological conditions. The

findings of fact contained herein address each of these situations and present the local situation, which either singularly or in combination, caused the aforementioned amendments to be adopted.

#### CLIMATIC

- A. Climate is one of the greatest impacts to fire behavior and other major emergency events because it cannot be controlled. The drying out of wood shakes and wild land fuels in the summer months allows for easy ignition.
- B. The building of homes within the weed covered rural areas and the combustible weeds on vacant urban lots coupled with windy conditions is a recipe for disaster. The Sacramento Area has four distinct seasons-summer, winter, fall, and spring. The magnificent distinction of these seasons are an attraction to the area and one reason why significant population growth has occurred. The population growth has impacted service levels causing a fiscal strain on emergency services and the result is increased response times.
- C. The Sacramento region has extreme variations in weather patterns too. Summers are arid and warm, winters are cool to freezing, fall and spring can bring any combination of weather pattern together. It is this cyclical uncertainty that allows weather events such as the rapid melting of the snow pack which causes flooding in the low-lying valley areas of Sacramento County. The doubling of average rainfall called an "El Nino" event has occurred from time to time and does cause the grass to mature

and grow in excess of six feet high before it dries out. Ten sq. feet of this type of fuel is equivalent to the explosive force of one gallon of gasoline.

- D. Average yearly rainfall for the County is approximately 17.87 inches. This rainfall normally occurs from October to April. Low-level fog (tulle fog) is present throughout the winter months, which brings visibility to almost zero feet. The fog delays emergency responders and has caused numerous vehicle accidents including the December 11, 1997, Interstate 5 incident in Elk Grove which involved 36 vehicles and caused 31 casualties including 5 fatalities. The fog can also cause freezing and slick roadways.
- E. During the summer months there is generally no measurable precipitation. Temperatures for this dry period range from 70 to 112 degrees F and are frequently accompanied by light to gusty Delta winds. The relative humidity during summer months range from 2 to 30 mmHG, which is arid. The county contains thousands of acres of grasslands, which, in conjunction with the dry and windy conditions create a hazardous situation, which has lead to extensive grass and brush fires in recent years. More development is extending from the urban core into the grass-covered areas and brush/tree covered canyons such as the American River Parkway, where every 20-percent increase in slope doubles the rate of fire spread. Wind driven fires could and have led to serious consequences in similar areas of the state.
- F. In the past, several consecutive years of drought conditions have occurred thus reducing the available water supply. Ground water as well as surface supplies have all been affected. The drought conditions have

led to lower water tables, reduced fire flow testing, water contamination, water conservation efforts, and increased demands on water systems due to extreme population growth. These impacts have negatively impacted water use and availability for the fire service. The degradation of water systems reduces the quality of fixed fire protection as well as fire suppression activities. As an example, in 1998, the City of Sacramento lowered its static water pressure from 50 psi to 30 psi. This change will make many fire protection systems ineffective and corrective measures such as adding pressure increasing booster pumps will be necessary at great cost to the community.

## TOPOGRAPHICAL

- A. The County is bisected by several topographical features, including major rivers, minor rivers and creeks, aqueducts, lakes, sloughs, natural parkways, open space, bridges/overpasses, freeways, railroad tracks, including light rail, drainage canals, sprawling industrial facilities, such as Gencorp Aerojet and former Armed Services Bases. Traffic has to be channeled around several of these topographical features and limitations, which creates traffic congestion and delays emergency response. These features are located between many of the Fire Stations located within Sacramento County. With the OSHA "two in-two out" rule requiring two fire fighters ready to make fire attack only when two others are present. It is imperative that no delays affect the timely response of the fire fighters.
- B. Heavy traffic congestion on the County's major streets already acts as a barrier to timely response for fire and emergency vehicles. Some

roadways are expected to double their traffic flow within the next ten years, and many intersections are already classified service level "F" – worst. In the event of an accident or other emergency at one of the key points of intersection between a road and river or freeway, sections of the County could be isolated or response time could be sufficiently slowed so as to increase the risk of injury or damage.

- C. Preservation of wetland areas, natural parkways, riparian corridors along rivers/streams, vernal pools, open space and endangered species habitat have all contributed to access problems as well as exemption from vegetation abatement programs. These situations, though very environmentally important, do increase the demands on the fire service due to the extreme fire hazard created by fuel loading and limited access.
- D. Large areas of rural grasslands and rolling hills with residential development significantly increase response times. Available infrastructure features, such as water supplies, do not provide sufficient fire flow in these areas. The rural geographical areas not yet provided with adequate fire protection are subject to a higher degree of risk without mitigating measures.

## GEOLOGICAL

A. Sacramento County is made of several communities, each unique in its own way. Many of these communities are remote. Large land areas lay between the urban core communities which have good fire protection and these communities with limited fire protection resources. The seamless fire protection efforts provided through "mutual aid" agreements

allow for each community to support each other but this also reduces coverage of fire stations during first and multiple response incidents. A first alarm assignment draws two fire engines, one ladder truck and a water tender in a rural area emptying three fire stations. A home as little as 1,500 sq. ft can draw a second alarm assignment in some instances. This could take out of service as much as six fire stations. This situation would cause a "move-up" of other fire stations to cover the empty stations. Thus, up to 15 fire stations could ultimately be affected for a second alarm assignment/dispatch. If you exacerbate the situation through simultaneous calls/events, long term commitments to emergencies, station brown outs, out of service emergency vehicles, etc., it's easy to see that extended response times will occur.

- B. The Sacramento Area is subject to ground tremors from seismic events as the County is in Seismic Zone 3. Water inundation has occurred in the portion that lay in river Delta areas. Intricate levee systems hold back a portion of the floodwater, however, development has moved into areas that have the potential for flooding.
- C. The Communities within the County have a propensity to be segregated in many ways due to geographical and geological features such as freeways, rivers, etc. These geological communities such as the Pocket Area, Rio Linda, Rancho Murieta, Natomas, Elk Grove, Rancho Cordova, etc., each have unique characteristics. Some communities are more subject to urbanization than others and some blighted areas are

targets for revitalization. Intensive use of land in urban areas means bigger buildings, which create complex problems for fire safety.

Urbanization in some of these geographically isolated communities has created social problems-the migration of the poor into these areas, the expansion of ghettos, gang related activities-have affected the magnitude of fire losses.

- (f) Based on the afore-cited local climatic, topographical and geological conditions, those specific amendments as specified in the amendments to this ordinance for the 2000 Uniform Fire Code of Sacramento County, are considered reasonable and necessary modifications to the requirements established pursuant to Section 18941.5. While it is clearly understood that the adoption of such amendments may not prevent the incidence of fire, the implementation of these various amendments to the code attempt to reduce the severity and potential loss of life, property and protection of the environment.
- (g) California Health and Safety Code Section 17958.7 requires that the modifications or change be expressly marked and identified as to which each finding refers. Therefore, the Board of Supervisors finds that the following table provides code sections that have been modified which are building standards as defined in Health and Safety Code Section 18909, and the associated conditions for modification due to local climatic, geological and topographical reasons.

Section Number	Local Climatic/ Geological/Topographical Condition
1003.2.2	1A, B, C, D, E & F; 2A, B, C & D; 3A, B & C
1003.2.4.1	1A, B, C, D, E & F; 2A, B, C & D; 3A, B & C
1003.2.10	1A, B, C, D, E & F; 2A, B, C & D; 3A, B & C
1003.2.11	1A, B, C, D, E & F; 2A, B, C & D; 3A, B & C

1003.3.1		1B, C, D & E; 2B & D; 3A, B & C
1003.5		1A, B, C, D, E & F; 2A, B, C & D; 3A, B & C
2401.1		1A, B, C, D, E & F; 2A, B, C & D; 3A, B & C
2403.5.1		1A, B, C, D, E & F; 2A, B, C & D; 3A, B & C
2405.4		1A, B, C, D, E & F; 2A, B, C & D; 3A, B & C
Appendix II- 6.1.1	-C,	1A, B, C, D, E & F; 2A, B, C & D; 3A, B & C
OFOTION		This configuration is the first and configuration for the first and a first

and on		
regular meeting of the Board of Supervisors on and on	pard of Supervisors on and or	regular meeting of the

This ordinance shall take effect and be in full force on and after thirty (30) days from the date of its passage, and before the expiration of fifteen (15) days from the date of its passage it shall be published once with the names of the members of the Board of Supervisors voting for and against the same, said publication to be made in a newspaper of general circulation published in the County of Sacramento.

On a	motion by Supervisor	, seconded	by Supervisor
	, the for	egoing ordinance was passed and a	dopted by the
Board of Su	upervisors of the County	of Sacramento, State of California,	this day o
	, 2002, by the fol	owing vote:	
AYES:	Supervisors,		
NOES:	Supervisors,		
ABSENT:	Supervisors,		
	-	Chairperson of the Board of S of Sacramento County Cali	•
(SEAL)		or odoramento county can	orna
ATTEST: _		<del></del> .	
	Clerk of the Board of	Supervisors	